



<110> The Scripps Research Institute

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Chung, Junho

<120> INTEGRIN ALPHA.IIb.BETA.3 SPECIFIC ANTIBODIES AND PEPTIDES

<130> TSRI 1019.1 US

<140> US 10/581,431

<141> 2004-12-03

<150> US 60/526,859

<151> 2003-12-03

<150> PCT/US2004/040381

<151> 2004-12-03

<160> 78

<210> 1

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> HCDR3 part

<400> 1

Cys Ser Phe Gly Arg Gly Asp Ile Arg Asn Cys  
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<210> 2

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> HCDR3 part

<400> 2

Gly Ser Phe Gly Arg Gly Asp Ile Arg Asn Gly  
1 5 10

<210> 3

<211> 16

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<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> VARIANT

<222> (3,4,5,9,10,11)

<223> encoded by randomized DNA sequence: Ala, Cys, Asp, Glu,  
Phe, Gly, His, Ile, Lys, Leu, Met, Asn, Pro, Gln, Arg, Ser,  
Thr, Val, Trp, Tyr

<400> 3

Val Gly Xaa Xaa Xaa Arg Ala Asp Xaa Xaa Xaa Tyr Ala Met Asp  
1 5 10 15  
Val

<210> 4

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> HCDR3 consensus part

<400> 4

Val Val Cys Arg Ala Asp Lys Arg Cys  
1 5

<210> 5

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> HCDR3 consensus part

<400> 5

Val Trp Cys Arg Ala Asp Arg Arg Cys  
1 5

<210> 6

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> HCDR3 consensus part

<400> 6

Val Trp Cys Arg Ala Asp Lys Arg Cys  
1 5

<210> 7

<211> 9

<212> PRT  
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<220>  
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<400> 7

Val Val Cys Arg Ala Asp Arg Arg Cys  
1 5

<210> 8  
<211> 16  
<212> PRT  
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<220>  
<223> CDR consensus part

<400> 8

Val Arg Val Val Cys Arg Ala Asp Arg Arg Cys Tyr Ala Met Asp  
1 5 10 15  
Val

<210> 9  
<211> 72  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> primer neo-rad-f

<220>  
<221> misc\_feature  
<222> (25,26,28,29,31,32,43,44,46,47,49,50)  
<223> n represents a, g, c, or t

<400> 9

gtgtattact gtgcgagagt ggggnnknnk nnkcggtgccg acnnknnknn ktacgctatg 60

gacgtctggg gc 72

<210> 10  
<211> 21  
<212> DNA  
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<220>  
<223> primer dpseq

<400> 10

agaagcgtag tccggaacgt c 21

<210> 11  
<211> 57  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> primer DP-47N-term

<400> 11

gctgccaac cagccatggc cgaggtgcag ctgttggagt ctgggggagg cttggta 57

<210> 12  
<211> 39  
<212> DNA  
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<220>  
<223> primer DP-47FR3

<400> 12

cactctcgca cagtaataca cggccgtgtc ctcggctct 39

<210> 13  
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<223> primer lead-VH

<400> 13

ggccatggct gggtgggcag c 21

<210> 14  
<211> 39  
<212> DNA  
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<220>  
<223> primer dp-EX

<400> 14

gaggaggagg aggaggagag aagcgtagtc cggaacgtc 39

<210> 15  
<211> 24

<212> DNA  
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<223> primer ompseq

<400> 15

aagacagcta tcgcgattgc agtg

24

<210> 16  
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<400> 16

ggccatggct gggtgggcag c

21

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<211> 41  
<212> DNA  
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<220>  
<223> primer RSC-F

<400> 17

gaggaggagg aggaggaggc ggggcccagg cggccgagct c

41

<210> 18  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> primer lead-B

<400> 18  
ggccatggct gggtgggcag c

21

<210> 19  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 19  
Thr His Ser Arg Ala Asp Arg Arg Glu

1

5

<210> 20  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> inversed RAD motif peptide

<400> 20

Val Val Cys Asp Ala Arg Arg Arg Cys  
1 5

<210> 21  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> inversed RAD motif peptide

<400> 21

Thr His Ser Asp Ala Arg Arg Arg Glu  
1 5

<210> 22  
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<220>  
<223> Synthetic Construct

<220>  
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<223> encoded by randomized DNA sequence: Ala, Cys, Asp, Glu,  
Phe, Gly, His, Ile, Lys, Leu, Met, Asn, Pro, Gln, Arg, Ser,  
Thr, Val, Trp, Tyr

<400> 22

Xaa Xaa Xaa Arg Ala Asp Xaa Xaa Xaa  
1 5

<210> 23  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> RAD motif peptide

<400> 23

Cys Arg Ala Asp Val Pro Leu Cys  
1 5

<210> 24

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> RAD motif peptide

<400> 24

Cys Met Ser Arg Ala Asp Arg Pro Cys  
1 5

<210> 25

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR consensus part

<400> 25

Val Arg Val Val Cys Arg Ala Asp Lys Arg Cys Tyr Ala Met Asp  
1 5 10 15  
Val

<210> 26

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR consensus part

<400> 26

Val Arg Val Trp Cys Arg Ala Asp Arg Arg Cys Tyr Ala Met Asp  
1 5 10 15  
Val

<210> 27

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR consensus part

<400> 27

Val	Arg	Val	Trp	Cys	Arg	Ala	Asp	Lys	Arg	Cys	Tyr	Ala	Met	Asp
1				5					10					15
Val														

<210> 28

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR consensus part

<400> 28

Val	Gly	Val	Val	Cys	Arg	Ala	Asp	Arg	Arg	Cys	Tyr	Ala	Met	Asp
1				5					10					15
Val														

<210> 29

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR consensus part

<400> 29

Val	Gly	Val	Val	Cys	Arg	Ala	Asp	Lys	Arg	Cys	Tyr	Ala	Met	Asp
1				5					10					15
Val														

<210> 30

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> CDR consensus part

<400> 30

Val	Gly	Val	Trp	Cys	Arg	Ala	Asp	Arg	Arg	Cys	Tyr	Ala	Met	Asp
1				5					10					15
Val														

<210> 31

<211> 16

<212> PRT

<213> Artificial Sequence

<220>  
<223> CDR consensus part

<400> 31

Val	Gly	Val	Trp	Cys	Arg	Ala	Asp	Lys	Arg	Cys	Tyr	Ala	Met	Asp
1				5					10					15
Val														

<210> 32  
<211> 118  
<212> PRT  
<213> Homo sapiens

<220>  
<223> RAD87 part

<400> 32

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly
1				5					10					15
Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Gly	Ser	Gly	Phe	Thr	Phe	Ser
				20					25					30
Ser	Tyr	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
				35					40					45
Glu	Trp	Val	Ser	Ala	Ile	Gly	Thr	Gly	Gly	Gly	Thr	Tyr	Tyr	Ala
				50					55					60
Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys
				65					70					75
Asn	Ser	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr
				80					85					90
Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Val	Arg	Val	Val	Cys	Arg	Ala	Asp
				95					100					105
Arg	Arg	Cys	Tyr	Ala	Met	Asp	Val	Trp	Gly	Gln	Gly	Thr		
				110					115					

<210> 33  
<211> 118  
<212> PRT  
<213> Homo sapiens

<220>  
<223> RAD9 part

<400> 33

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly
1				5					10					15
Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Gly	Ser	Gly	Phe	Thr	Phe	Ser
				20					25					30
Ser	Tyr	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
				35					40					45
Glu	Trp	Val	Ser	Ala	Ile	Gly	Thr	Gly	Gly	Gly	Thr	Tyr	Tyr	Ala
				50					55					60
Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys
				65					70					75

Asn	Ser	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr
				80					85					90
Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Val	Arg	Val	Val	Cys	Arg	Ala	Asp
				95					100					105
Arg	Arg	Cys	Tyr	Ala	Met	Asp	Val	Trp	Gly	Gln	Gly	Thr		
				110					115					

<210> 34  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <223> RAD12 part

<400> 34

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly
1				5					10					15
Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Gly	Ser	Gly	Phe	Thr	Phe	Ser
				20					25					30
Ser	Tyr	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
				35					40					45
Glu	Trp	Val	Ser	Ala	Ile	Gly	Thr	Gly	Gly	Gly	Thr	Tyr	Tyr	Ala
				50					55					60
Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys
				65					70					75
Asn	Ser	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr
				80					85					90
Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Val	Arg	Val	Val	Cys	Arg	Ala	Asp
				95					100					105
Arg	Arg	Cys	Tyr	Ala	Met	Asp	Val	Trp	Gly	Gln	Gly	Thr		
				110					115					

<210> 35  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <223> RAD34 part

<400> 35

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly
1				5					10					15
Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Gly	Ser	Gly	Phe	Thr	Phe	Ser
				20					25					30
Ser	Tyr	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
				35					40					45
Glu	Trp	Val	Ser	Ala	Ile	Gly	Thr	Gly	Gly	Gly	Thr	Tyr	Tyr	Ala
				50					55					60
Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys
				65					70					75
Asn	Ser	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr

				80					85					90
Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Val	Arg	Val	Val	Cys	Arg	Ala	Asp
				95					100					105
Arg	Arg	Cys	Tyr	Ala	Met	Asp	Val	Trp	Gly	Gln	Gly	Thr		
				110					115					

<210> 36  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <223> RAD3 part

<400> 36

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly
1				5					10					15
Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Gly	Ser	Gly	Phe	Thr	Phe	Ser
				20					25					30
Ser	Tyr	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
				35					40					45
Glu	Trp	Val	Ser	Ala	Ile	Gly	Thr	Gly	Gly	Gly	Thr	Tyr	Tyr	Ala
				50					55					60
Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys
				65					70					75
Asn	Ser	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr
				80					85					90
Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Val	Arg	Val	Val	Cys	Arg	Ala	Asp
				95					100					105
Arg	Arg	Cys	Tyr	Ala	Met	Asp	Val	Trp	Gly	Gln	Gly	Thr		
				110					115					

<210> 37  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <223> RAD32 part

<400> 37

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	His	Pro	Gly
1				5					10					15
Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Gly	Ser	Gly	Phe	Thr	Phe	Ser
				20					25					30
Ser	Tyr	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
				35					40					45
Glu	Trp	Val	Ser	Ala	Ile	Gly	Thr	Gly	Gly	Gly	Thr	Tyr	Tyr	Ala
				50					55					60
Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Val	Ser	Arg	Asp	Asn	Ser	Gln
				65					70					75
Ser	Thr	Ala	Tyr	Leu	Gln	Ile	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr
				80					85					90

Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Val	Gly	Val	Trp	Cys	Arg	Ala	Asp
				95					100					105
Lys	Arg	Cys	Tyr	Ala	Met	Asp	Val	Trp	Gly	Gln	Gly	Thr		
				110					115					

<210> 38  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <223> RAD88 part

<400> 38

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	His	Pro	Gly
1				5					10					15
Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Gly	Ser	Gly	Phe	Thr	Phe	Ser
				20					25					30
Ser	Tyr	Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
				35					40					45
Glu	Trp	Val	Ser	Ala	Ile	Gly	Thr	Gly	Gly	Gly	Thr	Tyr	Tyr	Ala
				50					55					60
Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Val	Ser	Arg	Asp	Asn	Ser	Gln
				65					70					75
Ser	Thr	Ala	Tyr	Leu	Gln	Ile	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr
				80					85					90
Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Val	Gly	Val	Trp	Cys	Arg	Ala	Asp
				95					100					105
Lys	Arg	Cys	Tyr	Ala	Met	Asp	Val	Trp	Gly	Gln	Gly	Thr		
				110					115					

<210> 39  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <223> RAD1 part

<400> 39

Glu	Val	Gln	Leu	Leu	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly
1				5					10					15
Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser
				20					25					30
Phe	Tyr	Gly	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
				35					40					45
Glu	Trp	Val	Ser	Gly	Val	Ser	Ser	Ser	Gly	Ile	Thr	Thr	Tyr	Tyr
				50					55					60
Ala	Ala	Ser	Val	Arg	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser
				65					70					75
Lys	Asn	Thr	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp
				80					85					90
Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Val	Arg	Thr	His	Ser	Arg	Ala



Thr His Ser Arg Ala Asp Arg Arg Glu  
1 5

<210> 44  
<211> 9  
<212> PRT  
<213> Homo sapiens

<220>  
<223> RAD3 part

<400> 44

Val Val Cys Arg Ala Asp Arg Arg Cys  
1 5

<210> 45  
<211> 9  
<212> PRT  
<213> Homo sapiens

<220>  
<223> RAD4 part

<400> 45

Val Trp Cys Arg Ala Asp Arg Arg Cys  
1 5

<210> 46  
<211> 9  
<212> PRT  
<213> Homo sapiens

<220>  
<223> RAD9 part

<400> 46

Val Val Cys Arg Ala Asp Arg Arg Cys  
1 5

<210> 47  
<211> 9  
<212> PRT  
<213> Homo sapiens

<220>  
<223> RAD11 part

<400> 47

Val Trp Cys Arg Ala Asp Arg Arg Cys

1 5

<210> 48  
<211> 9  
<212> PRT  
<213> Homo sapiens

<220>  
<223> RAD12 part

<400> 48

Val Val Cys Arg Ala Asp Arg Arg Cys  
1 5

<210> 49  
<211> 9  
<212> PRT  
<213> Homo sapiens

<220>  
<223> RAD32 part

<400> 49

Val Trp Cys Arg Ala Asp Lys Arg Cys  
1 5

<210> 50  
<211> 9  
<212> PRT  
<213> Homo sapiens

<220>  
<223> RAD34 part

<400> 50

Val Val Cys Arg Ala Asp Arg Arg Cys  
1 5

<210> 51  
<211> 9  
<212> PRT  
<213> Homo sapiens

<220>  
<223> RAD87 part

<400> 51

Val Val Cys Arg Ala Asp Arg Arg Cys  
1 5

<210> 52  
<211> 9  
<212> PRT  
<213> Homo sapiens

<220>  
<223> RAD88 part

<400> 52

Val Trp Cys Arg Ala Asp Lys Arg Cys  
1 5

<210> 53  
<211> 18  
<212> PRT  
<213> Homo sapiens

<220>  
<223> Anti-gp120 Fab part

<400> 53

Val Gly Pro Tyr Ser Trp Asp Asp Ser Pro Asp Gln Asn Tyr Tyr  
1 5 10 15  
Met Asp Val

<210> 54  
<211> 18  
<212> PRT  
<213> Homo sapiens

<220>  
<223> Synthetic Construct

<220>  
<221> VARIANT  
<222> (4,5,6,10,11,12)  
<223> Fab library part; Ala, Cys, Asp, Glu, Phe, Gly, His, Ile,  
Lys, Leu, Met, Asn, Pro, Gln, Arg, Ser, Thr, Val, Trp, Tyr

<400> 54

Val Gly Cys Xaa Xaa Xaa Arg Gly Asp Xaa Xaa Xaa Cys Tyr Tyr  
1 5 10 15  
Met Asp Val

<210> 55  
<211> 18  
<212> PRT  
<213> Homo sapiens

<220>

<223> Fab-4 part

<400> 55

Val Gly Cys Thr Gly Gln Arg Gly Asp Trp Arg Ser Cys Tyr Tyr  
1 5 10 15  
Met Asp Val

<210> 56

<211> 18

<212> PRT

<213> Homo sapiens

<220>

<223> Fab-7 part

<400> 56

Val Gly Cys Thr Tyr Gly Arg Gly Asp Thr Arg Asn Cys Tyr Tyr  
1 5 10 15  
Met Asp Val

<210> 57

<211> 18

<212> PRT

<213> Homo sapiens

<220>

<223> Fab-8 part

<400> 57

Val Gly Cys Pro Ile Pro Arg Gly Asp Trp Arg Glu Cys Tyr Tyr  
1 5 10 15  
Met Asp Val

<210> 58

<211> 18

<212> PRT

<213> Homo sapiens

<220>

<223> Fab-9 part

<400> 58

Val Gly Cys Ser Phe Gly Arg Gly Asp Ile Arg Asn Cys Tyr Tyr  
1 5 10 15  
Met Asp Val

<210> 59

<211> 18

<212> PRT  
<213> Homo sapiens

<220>  
<223> Fab-10 part

<400> 59

Val	Gly	Cys	Thr	Trp	Gly	Arg	Gly	Asp	Glu	Arg	Asn	Cys	Tyr	Tyr
1				5					10					15
Met	Asp	Val												

<210> 60  
<211> 18  
<212> PRT  
<213> Homo sapiens

<220>  
<223> Synthetic Construct

<220>  
<221> VARIANT  
<222> (7,8,9,10)  
<223> MTF library part; Ala, Cys, Asp, Glu, Phe, Gly, His,  
Ile, Lys, Leu, Met, Asn, Pro, Gln, Arg, Ser, Thr, Val, Trp, Tyr

<400> 60

Val	Gly	Cys	Ser	Phe	Gly	Xaa	Xaa	Xaa	Xaa	Arg	Asn	Cys	Tyr	Tyr
1				5					10					15
Met	Asp	Val												

<210> 61  
<211> 18  
<212> PRT  
<213> Homo sapiens

<220>  
<223> MTF-2 part

<400> 61

Val	Gly	Cys	Ser	Phe	Gly	Arg	Thr	Asp	Gln	Arg	Ile	Cys	Tyr	Tyr
1				5					10					15
Met	Asp	Val												

<210> 62  
<211> 18  
<212> PRT  
<213> Homo sapiens

<220>  
<223> MTF-10 part

<400> 62

Val	Gly	Cys	Ser	Phe	Gly	Lys	Gly	Asp	Asn	Arg	Ile	Cys	Tyr	Tyr
1				5					10					15
Met	Asp	Val												

<210> 63

<211> 18

<212> PRT

<213> Homo sapiens

<220>

<223> MTF-32 part

<400> 63

Val	Gly	Cys	Ser	Phe	Gly	Arg	Arg	Asn	Glu	Arg	Asn	Cys	Tyr	Tyr
1				5					10					15
Met	Asp	Val												

<210> 64

<211> 18

<212> PRT

<213> Homo sapiens

<220>

<223> MTF-40 part

<400> 64

Val	Gly	Cys	Ser	Phe	Gly	Arg	Asn	Asp	Ser	Arg	Asn	Cys	Tyr	Tyr
1				5					10					15
Met	Asp	Val												

<210> 65

<211> 18

<212> PRT

<213> Homo sapiens

<220>

<223> MTF-1 part

<400> 65

Val	Gly	Cys	Ser	Phe	Gly	Arg	Val	Asp	Asp	Arg	Asn	Cys	Tyr	Tyr
1				5					10					15
Met	Asp	Val												

<210> 66

<211> 18

<212> PRT

<213> Homo sapiens

<220>

<223> MTF-12 part

<400> 66

Val	Gly	Cys	Ser	Phe	Gly	Arg	Ala	Asp	Arg	Arg	Asn	Cys	Tyr	Tyr
1				5				10					15	
Met	Asp	Val												

<210> 67

<211> 18

<212> PRT

<213> Homo sapiens

<220>

<223> MTF-15 part

<400> 67

Val	Gly	Cys	Ser	Phe	Gly	Arg	Ser	Val	Asp	Arg	Asn	Cys	Tyr	Tyr
1				5					10				15	
Met	Asp	Val												

<210> 68

<211> 18

<212> PRT

<213> Homo sapiens

<220>

<223> MTF-7 part

<400> 68

Val	Gly	Cys	Ser	Phe	Gly	Lys	Arg	Asp	Met	Arg	Asn	Cys	Tyr	Tyr
1				5					10				15	
Met	Asp	Val												

<210> 69

<211> 18

<212> PRT

<213> Homo sapiens

<220>

<223> MTF-13 part

<400> 69

Val	Gly	Cys	Ser	Phe	Gly	Arg	Trp	Asp	Ala	Arg	Asn	Cys	Tyr	Tyr
1				5					10				15	
Met	Asp	Val												

<210> 70

<211> 18

<212> PRT  
<213> Homo sapiens

<220>  
<223> MTF-14 part

<400> 70

Val	Gly	Cys	Ser	Phe	Gly	Arg	Gln	Asp	Val	Arg	Asn	Cys	Tyr	Tyr
1				5					10					15
Met	Asp	Val												

<210> 71  
<211> 18  
<212> PRT  
<213> Homo sapiens

<220>  
<223> MTF-20 part

<400> 71

Val	Gly	Cys	Ser	Phe	Gly	Arg	Asp	Asp	Gly	Arg	Asn	Cys	Tyr	Tyr
1				5					10					15
Met	Asp	Val												

<210> 72  
<211> 16  
<212> PRT  
<213> Homo sapiens

<220>  
<223> Synthetic Construct

<220>  
<221> VARIANT  
<222> (3,4,5,9,10,11)  
<223> RAD library part; Ala, Cys, Asp, Glu, Phe, Gly, His, Ile, Lys, Leu, Met, Asn, Pro, Gln, Arg, Ser, Thr, Val, Trp, Tyr

<400> 72

Val	Arg	Xaa	Xaa	Xaa	Arg	Ala	Asp	Xaa	Xaa	Xaa	Tyr	Ala	Met	Asp
1				5					10					15
Val														

<210> 73  
<211> 16  
<212> PRT  
<213> Homo sapiens

<220>  
<223> RAD1 part

<400> 73

Val	Arg	Thr	His	Ser	Arg	Ala	Asp	Arg	Arg	Gly	Tyr	Ala	Met	Asp
1				5					10					15

Val

<210> 74

<211> 16

<212> PRT

<213> Homo sapiens

<220>

<223> RAD3 part, RAD9 part, RAD12 part, and RAD34 part

<400> 74

Val	Arg	Val	Val	Cys	Arg	Ala	Asp	Arg	Arg	Cys	Tyr	Ala	Met	Asp
1				5					10					15

Val

<210> 75

<211> 16

<212> PRT

<213> Homo sapiens

<220>

<223> RAD4 part and RAD11 part

<400> 75

Val	Gly	Val	Trp	Cys	Arg	Ala	Asp	Arg	Arg	Cys	Tyr	Ala	Met	Asp
1				5					10					15

Val

<210> 76

<211> 16

<212> PRT

<213> Homo sapiens

<220>

<223> RAD32 part

<400> 76

Val	Gly	Val	Trp	Cys	Arg	Ala	Asp	Lys	Arg	Cys	Tyr	Ala	Met	Asp
1				5					10					15

Val

<210> 77

<211> 16

<212> PRT

<213> Homo sapiens

<220>

<223> RAD87 part

<400> 77

Val Gly Val Val Cys Arg Ala Asp Arg Arg Cys Tyr Ala Met Asp  
1 5 10 15  
Val

<210> 78

<211> 16

<212> PRT

<213> Homo sapiens

<220>

<223> RAD88 part

<400> 78

Val Arg Val Trp Cys Arg Ala Asp Lys Arg Cys Tyr Ala Met Asp  
1 5 10 15  
Val